



SHERWIN-WILLIAMS.

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333074



September 2, 2010

Mr. Ray Klimcsak
U.S. Environmental Protection Agency
Region 2
290 Broadway 19th Floor
New York, New York 10007-1866

RE: Aqueous Sump Sample Collection Trip Report
at 2 and 4 Foster Avenue, Gibbsboro, New Jersey

Sherwin-Williams/Hilliards Creek Site
Gibbsboro, New Jersey
AOC Index Number: No. II CERCLA-02-99-2035

Dear Mr. Klimcsak:

The Sherwin-Williams Company (Sherwin-Williams) has prepared this trip report in response to a request by the United States Environmental Protection Agency (EPA) to collect aqueous samples from three sumps located in the buildings of 2 and 4 Foster Avenue, Gibbsboro, New Jersey. These two commercial buildings are located within the Paint Works Corporate Center, owned by Brandywine Operating Partnership, L.P. (Brandywine).

This request was outlined in a memorandum entitled "*EPA's Request for the Collection of Aqueous Samples from Sumps Located in the Buildings of 2 and 4 Foster Avenue, Gibbsboro, New Jersey*" dated January 27, 2010. In response to this request, Sherwin-Williams prepared the "*Aqueous Sump Sample Collection Technical Memorandum For 2 and 4 Foster Avenue, Gibbsboro, New Jersey*" dated March 2, 2010. The technical memorandum was approved in a subsequent EPA approval letter dated April 14, 2010.

BACKGROUND

The EPA previously collected sub-slab air samples (December 6-9, 2008) and indoor-air samples (March 26, 2009) at select commercial buildings located within the Paint Works Corporate Center, owned by Brandywine. The EPA sampling results indicated that VOCs were present in the sub-slab air. Subsequent indoor-air sampling established that many of these compounds were not present in the indoor-air. However, EPA indoor-air results did indicate that trichloroethylene (TCE) was found indoors at levels above the EPA Region 2 screening criteria within 2 and 4 Foster Avenue.

Based on the evaluation of these results, the EPA requested that Brandywine provide them with a product inventory from the affected buildings, which Brandywine submitted

to EPA on November 25, 2009. Based on EPA's review of the product inventory information provided by Brandywine, EPA concluded that the inventory contained within the buildings may not be the source of the TCE. Also included with the inventory provided by Brandywine, was the identification of three sumps located in buildings 2 and 4 Foster Avenue. Upon review of this new information, EPA then requested that Sherwin-Williams sample and analyze the standing water present in these sumps for VOCs.

The objective of the field effort was to ascertain if these sumps might be the source of the Volatile Organic Compounds (VOCs), specifically TCE, found in the indoor air samples collected by EPA from 2 and 4 Foster Avenue. This trip report summarizes the procedures and observations noted during the sump sample collection field activities, as well as the laboratory analytical results. The sump locations are identified on the attached Figure 1.

SUMP SURVEY AND SAMPLING

As proposed in the Technical Memorandum dated March 2, 2010, Sherwin-Williams conducted a visual inspection of the sump located in 2 Foster Avenue (MPSP0001) and each of the two sumps (MPSP0002 and MPSP0003) located in 4 Foster Avenue. As requested by the EPA in their April 14, 2010 approval letter, a pre-purge sample was collected from MPSP0001 and MPSP0002. This pre-purge sample was collected on May 25, 2010. It should be noted that MPSP0003 was dry and no sampling activities were performed at this location. A product inventory was performed in the general vicinity of each of the sampled sumps. A properly calibrated photoionization detector (PID) was used to screen for the presence of VOCs in the vicinity of the sump as well as within the sump itself. The two sumps were purged dry and allowed to recharge overnight. The following morning, May 26, 2010, a post-purge sample was collected from MPSP0001 and MPSP0002. All samples were submitted for VOC analysis. A more detailed narrative for each sump has been provided below.

2 Foster Avenue (MPSP0001)

This sump is located in the northeast corner of 2 Foster Avenue and is identified as MPSP0001. The sump is approximately 20 inches in diameter by approximately 23 inches deep constructed of plastic corrugated pipe. A 4-inch diameter plastic pipe enters the sump approximately nine inches below the existing concrete floor grade. The pipe appeared to be filled with sediment. The sump was noted to be in good condition. A sump pump was not installed.

The product inventory and inspection of the surrounding area yielded no chemicals, solvents or other potential sources of TCE. There were no above-grade perimeter drains surrounding the sump. A PID was used to perform field screening for VOCs in the area surrounding the sump and within the sump itself, including its contents. No readings were registered beyond background readings of 0.0 PPM as detailed in the summary table presented in the Field Summary section below.

Weston personnel collected a pre-purge aqueous sample from MPSP0001 and a split sample was collected by HDR, (EPA's Oversight Contractor). The sample was

collected using a dedicated bailer and transferred into certified clean vials for VOC analysis. The remaining volume of water was evacuated from the sump using a peristaltic pump with dedicated tubing until the sump was purged dry. A total of approximately 9.5 gallons of water with no odor or PID readings was collected. The purge water was transferred into 5-gallon buckets and transported to project's satellite accumulation waste staging area for sampling and disposal at a later date.

When the sump was emptied, its construction was evaluated for integrity and the composition of the sump was noted as previously described. A tile probe was advanced to a depth of approximately 23 inches below the concrete floor surface until it was met with resistance. A three-inch layer of sediment and debris was removed which revealed a brick sump bottom. These sediments were also transferred into 5-gallon buckets and transported to the satellite accumulation area. The sump was again screened with a PID and no readings were observed beyond background readings of 0.0 ppm.

After one hour, the water level in the sump did not recover sufficiently to allow a post-purge aqueous sample to be collected. A second attempt was performed after an additional three hours had elapsed, however the water level in the sump still had not recovered sufficiently to collect a sample. Sampling activities were then suspended for the day at MPSP001.

The following morning (May 26) the water in the sump had recovered sufficiently and a post-purge sample was collected for VOC analysis. The ambient air readings in the vicinity of the sump were 0.0 ppm and 3.1 ppm inside the sump; however this reading was not sustained.

4 Foster Avenue

Two sumps are located in the northeast corner of the building and are identified as MPSP0002 and MPSP0003, respectively (see Figure 1).

MPSP0002

The first sump, identified as MPSP0002, is approximately 20 inches in diameter by approximately 26 inches deep constructed of corrugated plastic pipe. There were no other pipes entering the sump. The sump was noted to be in good condition. An electric sump pump was installed and connected to a PVC pipe that penetrated the adjacent cinder block wall. The PVC pipe discharged into the 3 United States Avenue parking lot draining towards a catch basin. The sump contained approximately 2.5 gallons of water with no odor.

The product inventory and inspection of the surrounding area yielded no chemicals, solvents or other potential sources of TCE. There were no above-grade perimeter drains surrounding the sump. The PID registered readings of 0.8 ppm in the area surrounding the sump and within the sump itself, including its contents.

A pre-purge aqueous sample was then collected from MPSP0002 using a certified clean sample jar as the existing sump pump did not allow adequate space for a bailer to be used. A duplicate pre-purge sample was also collected from MPSP0002. The

remaining volume of water was evacuated from the sump using a peristaltic pump with dedicated tubing until the sump was purged dry. A total of approximately 2.5 gallons of water was collected. The purge water was transferred into 5-gallon buckets and transported to the satellite waste staging area.

When the sump was emptied, a tile probe was advanced to a depth of approximately 26 inches below the concrete floor surface until it was met with resistance. The solid bottom of the sump was covered by a one inch layer of sediment. The PID registered a reading of 2.6 ppm; however, this reading was not sustained.

The water level in the sump did not recover within 4 hours of purging the sump, so a post-purge sample was collected the following morning (May 26) for VOC analysis. The ambient air readings in the vicinity of the sump and inside the sump were 0.0 ppm.

MPSP0003

The other sump, identified as MPSP0003, is located approximately 75 feet away from MPSP0002. It is approximately 12 inches in diameter by approximately 13.5 inches deep constructed of perforated plastic pipe that had been installed within a 1.5' wide by 8.5' long trench backfilled with stone.

There were no other pipes entering the sump. The sump was noted to be in good condition. An electric sump pump was installed and connected to a PVC pipe that penetrated the adjacent cinder block wall. The PVC pipe discharged alongside the building draining towards a catch basin. The sump was dry and did not contain any water or other liquids. Since the sump was dry, there were no aqueous samples collected or PID readings taken from this sump.

The product inventory and inspection of the surrounding area noted the presence of an electric-operated air compressor and fan as well as the following substances: All Season Select Synthetic Lubricant for Reciprocating Compressors (approx. 10 oz. container), Kobalt Air Compressor Oil (16 oz. container) and SDC Precision Parts Cleaner ("The Aerosol Tool in a Can"). The SDC Precision Parts Cleaner contained n-propyl bromide, 1,1,1,2-tetrafluoroethane and tetrafluorobutane as listed on the back of the aerosol can. Based on their intended uses, it is likely that the synthetic lubricant and the compressor oil are both petroleum-based products and the parts cleaner is solvent-based. These materials appeared to have been in storage and not used for quite some time based on the amount of dust covering them.

SUMMARY OF FIELD OBSERVATIONS

The following table is a summary of the field observations noted during the investigation and sampling effort.

Sump ID	Sample ID	Pre- or Post-purge Sample	Volume of water removed	Sample Collection Date	Ambient air PID (ppm)	Sump with water PID (ppm)	Sump without Water PID (ppm)
MPSP0001	MPSP0001A-SP-AD-R1-0	Pre-purge	~9.5 gallons	5/25/10	0	0	0
MPSP0001	MPSP0001-SP-AE-R1-0	Post-purge	NA	5/26/10	0	3.1	NA
MPSP0002	MPSP0002A-SP-AE-R1-0	Pre-purge	~2.5 gallons	5/25/10	0.8	0.8	2.6
MPSP0002	MPSP0002-SP-AE-R1-0	Post-purge	NA	5/26/10	0	0	NA

LABORATORY ANALYTICAL RESULTS

The laboratory analytical results were compared to the NJDEP Ground Water Quality Standards (GWQS) and the VOCs detected in the sump samples are discussed below.

- 1,2-dichlorobenzene was detected in both the pre-purge (0.28J ug/l) and post-purge (1.8 ug/l) samples collected in MPSP0001. The GWQS is 600 ug/l.
- 1,2-dichloroethane was detected in both the pre-purge and post-purge samples collected from both sumps, as well as the duplicate pre-purge sample collected from MPSP0002. The detected concentrations ranged from 0.22J ug/l (MPSP0001 post-purge) to 2.0 ug/l (MPSP0002 post-purge). The GWQS is 2.0 ug/l.
- 1,2-xylene was detected in the post-purge (0.13J ug/l) sample collected in MPSP0001. The GWQS is 1,000 ug/l.
- Acetone was detected in the post-purge (47.0 ug/l) sample collected in MPSP0001. The GWQS is 6,000 ug/l.
- Benzene was detected in the post-purge (0.047J ug/l) sample collected in MPSP0001. The GWQS is 1 ug/l.

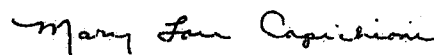
- Carbon disulfide was detected in the pre-purge (0.086 ug/l) sample collected in MPSP0001 and the post-purge (0.36J ug/l) sample collected in MPSP0002. The GWQS is 700 ug/l.
- Chloroform was detected in both the pre-purge (0.11J ug/l) and post-purge (0.056J ug/l) samples collected from MPSP0002, though it was not detected in the duplicate pre-purge sample (0.50 U ug/l). The GWQS is 70 ug/l.
- M,P-xylene was detected in the post-purge (0.053J ug/l) sample collected in MPSP0001. The GWQS is 1,000 ug/l.

There were no VOCs detected that exceed the NJDEP GWQS. The laboratory analytical results are summarized in the attached table.

In summary, PID field screening in combination with the laboratory analytical results do not indicate the presence of VOCs and support the conclusion that the sumps located inside 2 and 4 Foster Avenue are not the likely source of the VOCs that EPA detected during the indoor air sampling round conducted in March 2009. Trichloroethene (TCE), which the EPA specifically noted as a concern, was not detected in any of the samples collected from the sumps. There were no detections noted at 0.50 U ug/l; the GWQS is 1 ug/l. It is Sherwin-Williams conclusion that based upon these results there is no additional investigation or sampling of the sumps warranted at this time.

Should you have any questions or comments, please do not hesitate to contact me at (216) 566-1794 or via e-mail at mlcapichioni@sherwin.com.

Sincerely,



Mary Lou Capichioni
Director Remediation Services

Attachment

cc: J. Josephson, EPA (New York)
W. Sy, EPA (Edison)
L. Vogel, NJDEP (4 copies)
P. Parvis, HDR
R. Kenwood, Brandywine
J. Gerulis, Sherwin-Williams (w/o enclosures)
A. Danzig, Sherwin-Williams (w/o enclosures)
S. Peticolas, Gibbons, Del Deo, Dolan, Griffinger, & Vecchione (w/o enclosures)
H. Martin, ELM
R. Mattuck, Gradient
S. Jones, Weston Solutions
S. Clough, Weston Solutions
A. Fischer, Weston Solutions

LABORATORY ANALYTICAL RESULTS
AQUEOUS SUMP SAMPLES
2 and 4 FOSTER AVENUE, GIBBSBORO, NEW JERSEY

Analyte	Site ID Location ID Field Sample ID Date Collected	MP				
		MPSP0001	MPSP0001A	MPSP0002	MPSP0002A	MPSP0002A
		MPSP0001-SP-AE-R1-0	MPSP0001A-SP-AD-R1-0	MPSP0002-SP-AE-R1-0	MPSP0002A-SP-AE-R1-0	MPSP0002A-SP-AE-R1-1
	NJDEP GWQS	05/26/2010	05/25/2010	05/26/2010	05/25/2010	08/25/2010
VOLATILES						
(TIC-Total) VOLATILES (ug/l)	---	4.38	3.78	4	3.1	3.2
1,1,1-TRICHLOROETHANE (ug/l)	30	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-TETRACHLOROETHANE (ug/l)	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (ug/l)	---	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-TRICHLOROETHANE (ug/l)	3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-DICHLOROETHANE (ug/l)	50	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-DICHLOROETHENE (ug/l)	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,3-TRICHLOROBENZENE (ug/l)	---	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-TRICHLOROBENZENE (ug/l)	9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-DIBROMO-3-CHLOROPROPANE (ug/l)	0.02	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-DIBROMOETHANE (ug/l)	0.03	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-DICHLOROBENZENE (ug/l)	600	1.8	0.28 J	0.50 U	0.50 U	0.50 U
1,2-DICHLOROETHANE (ug/l)	2	0.22 J	0.23 J	2.0	0.95	0.76
1,2-DICHLOROPROPANE (ug/l)	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-XYLENE (ug/l)	1000	0.13 J	0.50 U	0.50 U	0.50 U	0.50 U
1,3-DICHLOROBENZENE (ug/l)	500	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-DICHLOROBENZENE (ug/l)	75	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-BUTANONE (ug/l)	300	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-HEXANONE (ug/l)	---	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-METHYL-2-PENTANONE (ug/l)	---	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
ACETONE (ug/l)	6000	47.0	5.0 U	5.00 U	5.0 U	5.0 U
BENZENE (ug/l)	1	0.047 J	0.50 U	0.50 U	0.50 U	0.50 U
BROMOCHLOROMETHANE (ug/l)	---	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BROMODICHLOROMETHANE (ug/l)	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BROMOFORM (ug/l)	4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BROMOMETHANE (ug/l)	10	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
CARBON DISULFIDE (ug/l)	700	0.50 U	0.86	0.36 J	0.50 U	0.50 U
CARBON TETRACHLORIDE (ug/l)	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
CHLOROBENZENE (ug/l)	50	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
CHLOROETHANE (ug/l)	---	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
CHLOROFORM (ug/l)	70	0.50 U	0.50 U	0.058 J	0.11 J	0.50 U
CHLOROMETHANE (ug/l)	---	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
CIS-1,2-DICHLOROETHENE (ug/l)	70	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
CIS-1,3-DICHLOROPROPENE (ug/l)	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
CYCLOHEXANE (ug/l)	---	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
DIBROMOCHLOROMETHANE (ug/l)	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
DICHLORODIFLUOROMETHANE (ug/l)	1000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
DICHLOROMETHANE (ug/l)	3	0.50 U	0.50 U	0.50 U	0.50 U	0.11 J
ETHYLBENZENE (ug/l)	700	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
ISOPROPYLBENZENE (ug/l)	700	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
M,P-XYLENE (ug/l)	1000	0.063 J	0.50 U	0.50 U	0.50 U	0.50 U
METHYL ACETATE (ug/l)	7000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
METHYLCYCLOHEXANE (ug/l)	---	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
METHYL-TERT-BUTYL-ETHER (MTBE) (ug/l)	70	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
STYRENE (ug/l)	100	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
TETRACHLOROETHENE (ug/l)	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
TOLUENE (ug/l)	600	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
TRANS-1,2-DICHLOROETHENE (ug/l)	100	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
TRANS-1,3-DICHLOROPROPENE (ug/l)	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
TRICHLOROETHENE (ug/l)	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
TRICHLOROFLUOROMETHANE (ug/l)	2000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
VINYL CHLORIDE (ug/l)	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
NJDEP GWQS New Jersey Department of Environmental Protection Groundwater Quality Standards						
J Estimated value						
U The compound was not detected at a concentration above the reporting limit						
ug/L micrograms per liter						



Silver Lake

4 Foster Ave.

MPSP0003

MPSP0002

MPSP0001

2 Foster Ave.

Foster Ave.

United States Ave.

LEGEND:



Sump Location

100 50 0 100

Scale in Feet

PROJECT:

Former Manufacturing Plant
Remedial Investigation

CLIENT NAME:

The Sherwin-Williams Company

TITLE:

AQUEOUS SUMP SAMPLE COLLECTION
2 AND 4 FOSTER AVENUE, GIBBSBORO, NJ
MAY 25 AND 26, 2010 SAMPLING EVENT



DATE:

8-23-2010

FIGURE #

1

